

§ 38.157

(b) Where provided within passenger compartments, handrails or stanchions shall be sufficient to permit safe on-board circulation, seating and standing assistance, and alighting by persons with disabilities.

§ 38.157 Lighting.

(a) Any stepwell or doorway immediately adjacent to the driver shall have, when the door is open, at least 2 foot-candles of illumination measured on the step tread.

(b) The vehicle doorway shall have outside light(s) which, when the door is open, provide at least 1 foot-candle of illumination on the pathway to the door for a distance of 3 feet (915 mm) to the bottom step tread or lift outer edge. Such light(s) shall be shielded to protect the eyes of entering and exiting passengers.

[56 FR 45756, Sept. 6, 1991, as amended at 63 FR 51698, 51702, Sept. 28, 1998]

§ 38.159 Mobility aid accessibility.

(a)(1) *General.* All vehicles covered by this subpart shall provide a level-change mechanism or boarding device (e.g., lift or ramp) complying with paragraph (b) or (c) of this section and sufficient clearances to permit a wheelchair or other mobility aid user to reach a securement location. At least two securement locations and devices, complying with paragraph (d) of this section, shall be provided.

(2) *Exception.* If portable or station-based lifts, ramps or bridge plates meeting the applicable requirements of this section are provided at stations or other stops required to be accessible under regulations issued by the Department of Transportation, the bus is not required to be equipped with a vehicle-borne device.

(b) *Vehicle lift—(1) Design load.* The design load of the lift shall be at least 600 pounds (2665 N). Working parts, such as cables, pulleys, and shafts, which can be expected to wear, and upon which the lift depends for support of the load, shall have a safety factor of at least six, based on the ultimate strength of the material. Nonworking parts, such as platform, frame and attachment hardware which would not be expected to wear, shall have a safety

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factor of at least three, based on the ultimate strength of the material.

(2) *Controls—(i) Requirements.* The controls shall be interlocked with the vehicle brakes, transmission, or door, or shall provide other appropriate mechanisms or systems, to ensure that the vehicle cannot be moved when the lift is not stowed and so the lift cannot be deployed unless the interlocks or systems are engaged. The lift shall deploy to all levels (i.e., ground, curb, and intermediate positions) normally encountered in the operating environment. Where provided, each control for deploying, lowering, raising, and stowing the lift and lowering the roll-off barrier shall be of a momentary contact type requiring continuous manual pressure by the operator and shall not allow improper lift sequencing when the lift platform is occupied. The controls shall allow reversal of the lift operation sequence, such as raising or lowering a platform that is part way down, without allowing an occupied platform to fold or retract into the stowed position.

(ii) *Exception.* Where the lift is designed to deploy with its long dimension parallel to the vehicle axis and which pivots into or out of the vehicle while occupied (i.e., “rotary lift”), the requirements of this paragraph (b)(2) prohibiting the lift from being stowed while occupied shall not apply if the stowed position is within the passenger compartment and the lift is intended to be stowed while occupied.

(3) *Emergency operation.* The lift shall incorporate an emergency method of deploying, lowering to ground level with a lift occupant, and raising and stowing the empty lift if the power to the lift fails. No emergency method, manual or otherwise, shall be capable of being operated in a manner that could be hazardous to the lift occupant or to the operator when operated according to manufacturer's instructions, and shall not permit the platform to be stowed or folded when occupied, unless the lift is a rotary lift and is intended to be stowed while occupied.

(4) *Power or equipment failure.* Platforms stowed in a vertical position, and deployed platforms when occupied, shall have provisions to prevent their deploying, falling, or folding any faster